

Minutes of the 1/16/80 LAPDOG meeting at BNL

Present: S. Aronson (S.A.), D. Cutfg (D.C.), R. Engelmann (R.E.)  
H. Foelsche (H.F.), B. Gibbard (B.G.), P. Grannis (P.G.)  
J. Kirz (J.K.), R. Lanou (R.L.), M. Marx (M.M.),  
P. Wanderer (P.W), A. Thorndike (A.T.)

- Agenda:
- 1) Comparison of various geometries
  - 2) Reports on various points
  - 3) Additional collaborators
  - 4) Jobs to be done for next meeting

In the following notes names of contributors are quoted when they are remembered in the notes of the bookkeeper (R.E.)

1) Comparison of various geometries:

P.G. compared the features of 3 geometries as shown in Table I.  
S.A. added the 4th one.

2) Various points:

- 1) S.A. estimated the fringe field for LAPDOG. for

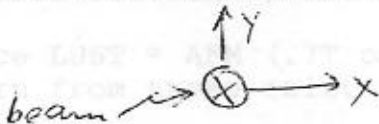


Fig. 5 shows  $B/B_0$  vs.  $x$ . BNL (Danby, Jackson) has no 3 dim. magnet program working yet. Jackson is installing such a program.

Comment: ANL has GFUN-3D working (ISABELLE?)

- 2) Radiation lengths of "thin" solenoids:

$\frac{1}{2}$  to 1  $X_0$  probably achievable, e.g. CCOR has 1  $X_0$ .

Comment: FNAL Colliding Detector Facility (CDF) design study has 0.6  $X_0$  for 1.5T,  $R = 1.5m$ . This is modelled after the PETRA CELLO magnet which has 0.5  $X_0$  for 1.5T,  $R = 0.75m$  only. Seems inconsistent.

In this context, how "open" is LUST really in the center (supports)?.